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THE HISTORY

OF

THE SANTEE CANAL

PREPARED BY THE LATE

PROF. F. A. PORCHER

AND DEDICATED TO THE

SOUTH CAROLINA HISTORICAL SOCIETY,

1875.

WITH AN

APPENDIX

BY

A. S. SALLEY, Jr.

PUBLISHED BY
THE SOUTH CAROLINA HISTORICAL SOCIETY
CHARLESTON, S. C.,
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At the first meeting of the board of curators of this Society I presented a map of St Stephen's Parish, S. C., and the parts adjacent, executed by Henry Mouzon, for the purpose of showing the several lines by which the Santee and the Cooper rivers might be connected by a navigable canal. At what time this map was published does not appear on the face of it, nor have I the means otherwise of determining its date. In one corner of the map is a vignette, exhibiting the indigo plant in its leaf and its seed, and an industrial picture representing the process of its manufacture. An old tradition long current in St Stephen's says that the portly figure who represents the master is that of Mr Peter Sinkler, and the figure near him, that of his overseer, Mr Guerry. If this tradition is true then the map must have been published before the war of the Revolution, for Peter Sinkler died, a prisoner in the provost marshal's prison in Charleston, when South Carolina was under the iron rule of Lord Cornwallis and his satellites.

The importance as well as the feasibility of connecting the two rivers by a canal, and thus shortening the distance, while it avoids the tedious and dangerous navigation of the lower Santee and the ocean, must have been patent to every thinker as soon as the settlements on the Santee extended beyond the easy reach of Cooper River, but it is a curious illustration of the habits of our people that we can find no trace of their speculations on this and other kindred topics—and while I am on the subject I will here mention that when I had determined to prepare this sketch I consulted the valuable files of newspapers belonging to the Charleston Library in search of facts which might prove useful and interesting, but without any success. Until the year 1820 one would never learn from our papers that the commerce of this city was largely fed by a canal, which made access to the upper country comparatively easy—nay, even the business directories which for a long period always occupied a considerable space in our yearly almanacs failed to announce the existence of such a body as the Santee Canal Company. In the year 1820 we find for the first time the announcement of its officers and directors at their office in Charleston, and that year, after the canal had been nineteen years in operation, we see for the first time on the commercial lists the arrival of boats through the Santee Canal.

That the importance of the work was deeply impressed on the minds of the thoughtful and enterprising men of the State appears from the fact that in March, 1786, when the country was still bleeding from the effects of the late war, and when industry was partially paralyzed by the visible decline of the indigo manufacture, a company was chartered for constructing a canal between the Santee and the Cooper Rivers. The charter was a perpetual one, with a grant of ample power and privileges. Among the names of the corporators we had those of John and Edward Rutledge, Gen Sumter, Gen Marion, Judges Gaillard, Burke and Grimke, H. Izard and Nath Russell. It is impossible to overestimate the importance of the Santee River as a channel of commerce of the several affluents which form it by their junction at what is now called Fort Motte. One, the Saluda, has its remote source in Greenville, near the celebrated Caesar's Head. Soon ceasing to be a mountain torrent it visits as a bold stream the old districts of Pendleton, Greenville, Laurens, Abbeville, Edgefield, Newberry and Lexington; another, the Broad, rises in the Hickory Nut Gap in North Carolina, and passing near the town of Rutherford, it enters Spartanburg, in South Carolina, and enlarged by the affluence of Pacolet and other smaller rivers it visits the districts of York, Union, Chester, Fairfield and Richland. Effecting at Columbia a junction with the Saluda, it receives the name of the Congaree and hastens to meet the other great affluent of the Santee, washing the district of Richland on the north and then of Lexington and Orangeburg on the south. In the Blue Ridge of North Carolina rises the Catawba, which in its course passes near the towns of Lincolnton and Charlotte. On entering South Carolina between York and Lancaster and passing thence by the town of Camden, above which it is known as the Wateree, it washes the soil of Sumter and of Richland before it joins the Congaree and forms the Santee. The great river thus formed by its mighty affluents flows down to the sea with Orangeburg and Charleston on its south and

Sumter, Williamsburg and Georgetown on its north bank. Thus more than half the State may use the waters of this noble river as their commercial highway, and the imagination can put no limits to the amount of manufacturing industry which may be fostered by its water power. No project of internal improvement ever offered such rich and continually increasing rewards as this did. Important as the upper country was at that epoch, it had a sure prospect of indefinitely increasing importance, and the canal which brought the great river into close connection with Charleston might be considered a property whose value would indefinitely increase with time and with the development of the country. These were reasonable hopes: they were utterly deceived, and I have long thought that the frustration of these hopes had a permanently injurious effect upon the spirit of enterprise of our people.

Though the charter was granted in 1786 it was not until 1793 that the work was commenced. Doubtless the pressure of the times retarded the commencement of operations. Late in 1800, perhaps, not before the end of December, the canal was opened for the passage of boats from river to river. From that time to the final abandonment of the canal in 18— the brilliant hopes which had ushered it into existence began to decline, until they entirely disappeared, and this great, useful and important enterprise was known only as a commercial failure.

Mouzon's map, without going into particulars as to the elevations to be overcome, lays down five lines on either of which a canal might be constructed. He proposed to avail himself of the natural channels furnished by Biggin Swamp and Fair Forest Swamp, whose junction forms the western branch of Cooper River, and of the eastern branch and its tributaries, including Great Hell Hole Swamp, and to reach the Santee by touching one of its affluents, known respectively as Greenland Swamp Mattasee Lake, Santee Creek and Savannah Creek. The distance from the Santee to the eastern branch is only fifteen miles; to the western branch, through Fair Forest Swamp, sixteen miles, whilst through Biggin Swamp it is twenty-one miles. This line, however, has the advantage of shortening by from forty to sixty miles the distance from Greenland Swamp to Cooper River below the junction of the two branches. It is probable that on each of these lines it would have been unnecessary to construct an artificial reservoir by which rain water might be held for the use of the canal.

The work was committed to the superintendence of Col John Christian Senf, a Swede, who probably came to this country during the war of the Revolution; and who held the office of chief engineer of the State. That he was a great artist is proved by his work; that he was a judicious one may be doubted. It seems to me that if he had selected Greenland Swamp as his point of departure he would have had a navigable stream almost ready to his hands, and thereby making as direct a line as possible to Biggin Swamp, he would for the greater part of his line have had water flowing from perennial springs, and would have had, if not a shorter summmit level to overcome, at least it would have been that level alone which would have been absolutely dependent upon such reservoirs. He did commence the canal on a bluff about two miles below Greenland Swamp, and almost from that point to the lower Black Oak Lock, where the canal enters Biggin Swamp, for a distance of about thirteen or fourteen miles the water was almost exclusively supplied by artificial reservoirs.

With all his abilities Col Senf had infirmities of temper which made him an unsafe director in this pioneer of industrial enterprise in the State. I know nothing of his history except what can be gathered from the traditions of St John's, Bekeley. For eight years he habitually resided in that country and his social virtues commended him to the good will of the people. But he seemed to be governed by an inordinate vanity, which could brook not even the appearance of a rival. Thus, though his judgment approved of Mouzon's line from Greenland Swamp, he deviated from it as much as it was possible for him to do, and instead of using the natural channel of Greenland Swamp, he commenced on a bluff of the river on which the current was perpetually wearing, and which, therefore, had to be protected from injury by artificial breakwaters.

It has been asserted, however, that it was not jealousy of Mouzon which governed Col Senf in the choice of a location, but that he was acting in obedience to the will of one of the directors, who, possessing a large body of land on the river bank, hoped to improve its value by running the canal through it. He had actually planned the site of a town, which was to bear his name and increase his wealth. If this is true, and no doubt of its truth existed in that country, then the engineer is chargeable with having sacrificed his judgment to the reckless greed of one of his employers. The scheme failed. The wealth did not come; but the reason still serves to point a moral. I do not know that it can be asserted that the sins of these two individuals were among the causes of the ultimate failure of the enterprise. The time came when the bed of the canal was dry from White Oak

Lock to Black Oak, a distance of fourteen miles. This could never have happened had the engineer made a practical use of the natural water courses.

A few anecdotes are current illustrating this jealous vanity of the engineer. Major Samuel Porcher's residence, which was ruthlessly destroyed during the late war by Gen Hartwell, was near the canal, and not only had a commanding view of the canal, or perhaps its most interesting section, but was itself a conspicuous object from the point where the great river road intersects it. Col Senf had often enjoyed his hospitality and was desirous of showing his appreciation of his kindness by making a professional return. He therefore offered if the Major would put a certain number of workers at his disposal to embellish his grounds after the best style of scientific art. The Major was quite willing to avail himself of the Colonel's art, but his observation of the manner in which he superintended laborers convinced him that if he complied with his request he would have his estate beautified at a cost far beyond his means. He therefore suggested that if the Colonel would give him the plan he would have it faithfully executed under his own supervision. But this by no means suited the views of the jealous engineer. He was willing to give his time and his taste, but no other person should contribute to the work, and so the scheme of embellishment was dismissed.

Another anecdote presents his jealous vanity in a light at once ludicrous and unamiable. At Simpson's Lock the canal is ready to enter the Biggin Creek; there the tide flows up to the canal and here in fact it enters Cooper River. Instead, however, of using the tortuous and, sluggish stream, he determined to cut a new channel so as to have a straight course for two miles down to the river proper. Every preparation was made for the successful operation of the work, the channel was dug and a day was appointed when the river should be solemnly admitted into its new channel. He spoke of it as a great and crowning effort of engineering skill, and on the evening before the fatal day he went with some select friends to spend the night with Gen Moultrie. The latter, aware of his intended visit, invited his neighbors to meet and breakfast with the great engineer and accompany him to the scene of his triumph. Col Senf had an intelligent German servant whom he sent forward early in the morning to see that no oversight had occurred in the preparations, and then sat down to enjoy a luxurious breakfast with his admiring friends. After leisurely enjoying their meal the party set off to witness the crowning triumph of art, the diversion of a river from its old bed into a new one. On reaching the spot what was their amazement to find the river flowing in its new channel as quietly as if it had never known any other. The servant who knew what was to be done, but did not know that it was to be the last scene in an act of glorification, had quietly done it and was idly waiting for further orders. The triumph of art was complete. So perfect had all the preparations been that it needed not the master's hand to finish it. But this did not satisfy the Colonel. He only saw himself robbed by a presumptuous servant of a fame which was justly his own, and he instantly dismissed him from his service. Not many years afterwards that servant was himself the superintendent of the canal.

The estimated cost of the work was fifty-five thousand pounds sterling. Its actual cost was nearly four times that amount. In constructing a work of this kind obviously the best and cheapest way of proceeding is to divide it into sections and let them out to contractors, who shall work under the general supervision of the engineer, and whose work shall not be accepted and paid for until approved by him. Col Senf undertook not only the general supervision, but the immediate superintendence of the laborers, and in large measure assumed the functions of an overseer. Hence, of course, a great waste of time as well as loss of money. The short distance, 22 miles, was not completed until after eight years of work, being less than three miles a year at a cost of more than thirty thousand dollars a mile. Add to this enormous cost the loss sustained by the subscribers in waiting so long for their money, and the actual cost was nearly forty thousand dollars per mile. All economical ideas were rejected. The charter had limited their clear annual income to 25 per cent of their expenditures, and they confidently expected that this profit would flow in so rapidly that the tolls would be little more than nominal.

Hitherto I have spoken of Col Senf in a way which is the reverse of complimentary. I must now take up his defence. I have given hitherto the prevailing opinion of those people who habitually saw him at his work; but he is not without strong grounds of defence.

Col Senf was by no means blind to the advantage of contract work, but thought it would not answer with the people with whom he had to deal. The ignorant laborer might make excavations by contract, but it would require a set of better instructed laborers to make and form dams from these excavations. He feared, too, that the overseers would prefer the interests of the owners of the labor to those of the canal, and that in settling for

the work done there would be endless disputes. He preferred, therefore, that all the laborers should be day laborers, to be alike employed as he should direct. This is in brief his own objection to contract work, but his modesty perhaps prevented him from giving the best—there were no engineers capable of superintending the contract work. This canal was a pioneer of inland navigation enterprise in America. I do not mean to say that there were no canals in the country. But certainly there were very few and none of any magnitude. There were, therefore, no practical engineers who could superintend the work of the contractors and Col Senf had to instruct his subordinates. This fact we must always bear in mind when we hear him condemned for undertaking the details of the superintendence.

Again, the price of labor had increased largely between 1793 and 1800. At first the canal paid from £15 to £16 per head, two-thirds of which were men. By the year 1800 the price of labor had risen to £24 per annum for men and £20 for women, and the hirers insisted on their employing an equal number of women with men. The work was commenced in 1793 with ten laborers. By the month of July the number was raised to one hundred and fifty. After that time a freshet in the Santee River brought in so many laborers to the canal that by the end of the year they amounted to over a thousand. In 1794 eight hundred were employed and in 1795 and 1796 seven hundred.

The construction of the canal was begun at a critical period in the agricultural history of the surrounding country. During the Colonial period the bounty which the British Government had paid on indigo had built up the culture and manufacture of that product, and poured wealth into the laps of the planters. With independence the bounty being, of course, withdrawn, the State now obliged to compete on even terms with the rest of the world, found the culture of indigo of questionable profit, and it was in a languishing state and no culture as yet attracted the industry which was devoted to this ancient staple. About this time, too, the natural effects of the opening of the upper country began to show themselves in the devastation of some of the most fertile lands in the State. When Mouzon's map was published the whole of Santee Swamp comprised within its limits was teeming with industrial life. In the depths of that fertile region would be found plantations which were absolutely swamp lands and it used to be a marvel to hear the old inhabitants tell of the rich abundance of everything that could gladden the heart of the agriculturist which its teeming soil produced. Besides the staples of rice and indigo all sorts of edible grains were produced even to excess, and as a natural consequence fine cattle with an endless supply of milk and butter poultry of all kinds to gladden the heart of the hospitable lady of the mansion, and horses in such number that the spacious stables erected for their accommodation could not contain them. Some idea of this abundance may be obtained from an inventory made by the commissioners appointed by the State to report on the property of Mr Peter Sinkler, which was destroyed by the British when they carried him to die in the provost's prison in Charleston. Among other articles enumerated are twenty thousand pounds of indigo, sixteen blooded horses, twenty-eight blooded mares and fillies, one hundred and thirty head of stock cattle, one hundred and fifty-four head of sheep and two hundred hogs. All these animals drew their sustenance from a tract of land of no great magnitude in the bosom of Santee Swamp.

Inundations of the river were of frequent occurrence, but they were harmless. An embankment of moderate dimensions was sufficient to protect the dwellings from the swollen waters of the river, but about this time they became more serious. As the upper rains were freed from their obstacles the waters rushed more rapidly to the rivers and came down in such abundance as to destroy the result of the year's labor. Col Senf says that towards the end of 1793 the laborers who in July were not one hundred and fifty, had reached a thousand. The canal was a beneficent being which was destined to be the salvation of the planters; feed and pay for their negroes whose labor was thus nipped just as it was ready to yield its fruit. I have often heard the people say that they had been saved from ruin by the demand of the canal for laborers. These freshets increased in frequency and in destructiveness. That of 1796 was so high that it has ever since been a standard by which all subsequent inundations were measured. John Drayton in his "View of South Carolina" says that the water flowed out of the Santee through Hell Hole Swamp into Cooper River. Major Charles Parker, who not many years since surveyed that country to examine the feasibility of diverting the Santee into the east branch of the Cooper River, says that the statement cannot be true. The flood would have submerged the whole country. The result of these frequent and destructive freshets was that by the end of the century the swamp was abandoned and St Stephen's ceased to be one of the richest districts in the State.

If the devastations of the river aided the canal by sending hands there to find profitable employment, the introduction of a new staple just at that time drew labor-

ers from the canal and caused an excessive increase in the rate of wages. In 1794 Gen Moultrie planted cotton on his Northampton plantation, near Black Oak. In 1795 Capt Peter Gaillard planted it on his Rocks plantation, not far from Eutaw, a place which he had a short time before purchased in order to make provision for the support of his St Stephen's property. The result of his experiment was so eminently prosperous that cotton at once took the place of indigo and by 1800 was the recognized staple of the country. Thus the country was saved, a new and profitable staple was substituted for the useless indigo. But the canal suffered by it. Wages had increased by one-half of the former prices, and those of overseers and other employees were advanced to double their former rates.

But there was another difficulty which Col Senf had to encounter, and which must have tended greatly to swell the expense of the work. This was the fever of the country. He said that every year he was obliged to make a change of tradesmen and other skilled laborers; no tradesman of any real skill could be induced to remain on the canal in the summer, the season when the work could most advantageously be performed. Sometimes he could make contracts with them only from month to month. Hence the almost impossibility of training and educating young men to act as efficient assistant engineers, and hence a vast amount of work devolving upon the chief. Hence, too, the slow progress of the work. The record of mortality from fever is a sad one. In his final report he says:

From the year 1793 to the beginning of 1800 twenty-four white persons died at the canal of fever; of which number were two physicians, two assistants, three commissaries, two master carpenters, three master bricklayers and two head overseers; the rest were journeymen tradesmen and overseers. It may easily be conceived that under such inconveniences and changes it was impossible to effect what might have been even reasonably expected.

The canal had to contend against another inconvenience, which perhaps was rather vexatious than resulting in serious expenditure. This was the sturdy opposition of the resident population to having the work pass through their lands. One would imagine that on the project of such an enterprise land-holders would eagerly compete for the advantage of giving it a right of way. It would add largely to the value of the property, and in a healthy state of society every lock would loom up in the eye of the speculative proprietor as the site of a future flourishing town. But it was not so regarded here. On the contrary, it was looked upon as an intolerable nuisance, and loud and clamoring were the demands for damages when the canal trespassed upon any one's lands. This was one of the consequences of slavery. The planters had no fancy for the passing through their estates of slowly moving boats with all the appliances for demoralizing their negroes. Hence an almost universal opposition. Col Senf says that there were only two gentlemen whose lands were trespassed upon who did not feel themselves aggrieved. One was Major Porcher, the other the director whose influence was supposed to have made the White Oak Bluff the starting point of the canal. The subject of compensation for injuries done was a delicate as well as a harassing one. Col Senf recommended compensation in all cases where a property was seriously ininjured. In the case of the rice fields on Biggin Swamp he thought a few acres yielded to the canal amply paid for by increased security from floods and the privilege of taking water from the canal; in other cases he says that for the loss of a small quantity of land the planter receives a safe and convenient navigation to market, and in justice such planter should rather make some compensation to the company which procured him such advantages.

All obstacles and opposition were at length happily overcome, and by the end of 1800 the canal was fully opened for the passage of boats from one river to the other, and though it was a sad mercantile failure and a cause of bitter disappointment to its projectors, it continued for fifty years to be a useful commercial highway, until it was rendered useless by the extension of the South Carolina Road to Columbia and Camden. By the first it was restricted to the trade of the Wateree River; when the latter branch was completed there was no more business for it. It was the intention of the company to take entire possession of the boats when they entered the canal and pass them through by teams provided for the purpose, but as the navigation of the Santee required a strong force of hands to take the boats up the river, it was found that they could also draw the boats through the canal nearly as fast as the teams could do it, and these last were abandoned.

Having now brought the canal to its completion let us take a survey of the whole work.

The canal is twenty-two miles in length, it is thirty-five feet wide at the surface of the water and twenty feet at the bottom, its depth is five and one-half feet, with four feet of water, capable of carrying boats of twenty-two tons burden; on each side is a draw-path ten feet wide; it has two double and eight single locks, and in

its course over the country it lies over eight aqueducts or culverts through which as many swamp streams find a passage under its beds. From the Santee it rises by locks thirty-four feet to the summit level, whence it descends by seven locks to Cooper River, sixty-nine feet, making the difference of level between the two rivers thirty-five feet.

I have already said that the canal begins at the edge of White Oak Bluff, on the Santee River. A little to the west are the ruins, scarcely visible, of the residence of Thomas Walter, who devoted his leisure to the study of the botany of South Carolina, and whose catalogue of plants, published in London in 1789, is dated "ad Ripas Fluvii Santee." The old homestead and the garden, which was the delight of the old botanist, are now a waste and are known only to the curious. A grandson of Walter is now an eminent physician in this city, and has published several works illustrating the favorite pursuit of his ancestor. On the east of the canal, so near that it may be said to touch it, is the great embankment of Major Samuel Porcher, a stupendous enterprise, a bank four miles in length, nine feet in height, of enormous base and wide enough at the top to permit the easy passage of ten men who meet each other on horseback. This work, which was the favorite pursuit of the Major's life, was constructed to protect his extensive swamp lands from the freshets of the river, which it effectually did, but it has gone to ruin as one of the results of the late war. About one hundred and fifty feet from the river we come to the first lock.

As you may be ignorant of the use and construction of a lock, it may not be amiss here to attempt a description of one. As a canal generally passes over an uneven country, it is usually constructed on several levels, and the locks are the contrivances by which boats are made to ascend or descend from one level to another. The locks on the Santee Canal are boxes of masonry 60 feet long, 10 feet wide, with a depth corresponding to the height or depth to be accomplished. When the canal comes to the end of a level it is finished with masonry and the wall carried perpendicularly to the depth of the next level, the bottom is also of masonry and the side walls are continued to the height of the draw-path on the higher level. Above this perpendicular wall are ten solidly constructed gates, which shut in upon each other, presenting a sharp angle to the water in the upper level. In the masonry about the perpendicular wall sluices are provided through which water is passed into the lock. At the lower end of the lock are two gates, which open into the lock, and like the others shut upon each other—near the bottom of these gates are valves which are opened or shut by means of a crank at the top—by means of these the water is discharged from the lock when full. This gate is usually half open on account of the enormous pressure upon the works by the water. Now let us suppose a boat in the lower level to be raised to the higher one. As soon as it enters the lock the gates are closed upon it and the sluices at the upper gate opened—as the lock gradually fills the boat rises, and when the water in the lock rises to the level of the upper level, the pressure now being equal on both sides, the gates are opened and the boat passes out of the lock. If there is a boat on the upper level wishing to descend, it passes immediately through the open gates, which are then closed upon it, and the valves of the lower gates opened to let out the water from the lock. When it has got down to the level of the lower canal the gates are opened and the boat passes out. It takes about half an hour to pass a boat through a lock.

As the water in the river is a variable quantity it sometimes rises so high in the canal as to make this lock worthless for the purpose of raising boats. When the river is low the ascent accomplished by this lock is five feet. It is larger than the other locks, being so constructed that while the boats are in it their cargo must be trimmed so as to permit the boats to enter the other locks. About a mile further the canal skirts the edge of the swamp so near that I remember that in the great freshet of 1837 a canal boat was washed over the bank and stranded in Major Porcher's corn field. We now come to a lock by which the canal makes a rise of ten feet. Though it is in the highland it has to cross a long swamp, and for nearly half a mile its bed is three feet above the surface of the earth. About a mile and a half from White Oak Lock we arrive at the summit level which the canal ascends by a double lock to the height of 19 feet. Here then the canal has reached its greatest elevation, being thirty-four feet above the ordinary level of the Santee.

The double lock, or Big Camp, as it is generally called, is a very picturesque and interesting feature in the canal. On the left and a little to the rear is the residence of Major Porcher, with all the farm appurtenances; on the right, a little in front, is the residence of the lock keeper; in front, less than a quarter of a mile, is the bridge by which the Eutaw road crosses the canal, just below is the basin constructed for boats to lie in, on the edge of the bank is the large brick ware house,

and a little removed to the east and fronting on the Eutaw road is the director's house, with its outbuildings, and near them the overseer's house and work shops. Deep cutting has been necessary and the bridge is several feet above the surface of the canal. This summit level is five miles in length. Its supply of water is dependent upon the rains, which swell the level of Kirk Swamp, its principal feeder. In order to keep the water in the swamp it is enclosed by a dam four hundred yards in width and twenty-two hundred yards long; and as the canal must lie below its level in order to receive its water, it was necessary to dig sometimes as much as sixteen feet before excavating the canal proper, making in all a depth of twenty-two feet.

This deep cut is about three miles in length, and then we have on the west a view of Kirk Swamp reservoir, the sole feeder of this level and one of the principal feeders of the canal. In the spring of the year it used to be covered with the pond lily, whose broad white and flat blossoms floated gracefully on the bosom of the waters, and was an attractive sight in this otherwise gloomy tract of country, for the course of the canal is now entirely through the forest and no signs of business life are to be seen. Five miles from the double lock we reach the end of the summit level and descend by a lock ten feet deep into a lower level of country. On the left we can see a part of a reservoir of 150 acres, which is to feed this level and we know that another is on the right. By the bridge over the lock the St John's road from Monck's Corner to Greenland Swamp crosses the canal. The route is then over an uneven country, the bed of the canal sometimes having its bed as high as eight feet above the surface for about a mile and a half when we come to another lock with a descent of ten feet, and about half a mile further on we find another lock with a descent of five feet. A short distance to the west is the main stream of upper Biggin Swamp, which is fed by perennial springs gushing from limestone rock, and fed also by tributary streams, which, coming from the east, pass under the canal by aqueducts or culverts. But none of this water feeds the canal; the whole course through the highlands is supplied with water from artificial reservoirs, largely dependent upon rain water, which are constructed about the summit level. Leaving this small lock we pass for three miles through a very uneven country, sometimes cutting through high sand hills, sometimes raising the bed of the canal several feet above the surface of the low ground, and passing by way of a large tributary of Biggin Creek. Leaving this the land is higher and the digging is deep until we get to Black Oak, three miles from the last mentioned lock.

Black Oak is classic ground. Here one of the public highways crosses the canal. The public road to Biggin Church is nearby and in sight. Here is an Episcopal Church and here, too, stood the club house of the old St John's Hunting Club. In this house the planters of the neighborhood met on stated days, sometimes once, sometimes twice a month, for social intercourse, and a dinner rigidly prescribed was furnished by one of the members. As the meetings were stated, the club always had visitors, great men from a distance, who would go thither on that day to enjoy social intercourse with the people of that district. The records of the club were kept in a large book, and to this day one can read a notice of every dinner that was eaten there since it was first organized in 1800; who furnished the dinner and presided; what members were present, and what guests were entertained. Here went the board of school commissioners and of overseers of the poor, and here the commissioners of roads always held one of their meetings, the other being held at Biggin Church. It is needless to add that at all these meetings a dinner was furnished. Black Oak, too, was the muster field when St John's had three military companies.

I remember once, perhaps in 1831, on a club day, just as dinner was about being served, our attention was directed to an extraordinary crowing of cocks at the canal. We went thither and saw in the lock a boat which was laden with coops in every one of which was a game cock, crowing with all his might. On inquiring we were told that they belonged to a gentleman from the upper country of high social position, but of a decidedly sportive tendency. He was travelling on the boat with his cocks, but had walked on whilst his boat was going through the lock. He was not personally known to any of us, but his name was a passport in the best company and a deputation was sent to invite him to dine with the club. He came and so completely did he possess himself that a stranger coming upon us would never have doubted that he was the most reputable citizen of the neighborhood. He said that he had heard that the Governor of Havana was a lover of the cockpit, and with this venture he was going to try his fortunes in that city. After spending an hour pleasantly with us he left us and went to rejoin his crowing cargo.

Black Oak was also the scene of many political meetings when the nullification contest was high. It was generally the stronghold of the Union party, but in November, 1831, the State Rights party gave

a public dinner there to some of the dignitaries of the State. The tables were spread amid the oaks on the north of the club house and about three hundred men went to welcome their guests. Gen Hamilton, Gen Hayne, Mr Robert J. Turnbull, Isaac E. Holmes and Mr, afterwards Chancellor, Dunkin addressed the people on that occasion.

The Episcopal Church was opened for divine service in 1800. It was closely connected with the Pineville Church and served by the same minister. In the year 1846 the old church having become too small for the congregation the new one was opened for public worship, and not long afterwards the congregation, being desirous of more frequent ministrations, elected the Rev C. P. Gadsden to be their assistant minister, but soon afterwards yielded to the wishes of the other churches, so that Messrs Dehon and Gadsden ministered in all three of the churches. It was not until 1847 that the churchyard was used as a cemetery. Since that time it has been largely strewn with the graves of the congregation. In sight of Black Oak, a little to the northeast, is Pooshee, the old residence of one branch of the Ravenel family. In front, but not in sight, is Wantoot, the residence of another branch, which was ruthlessly destroyed by Gen Potter in 1865. About a mile and a half to the west is Northampton, formerly the residence of Gen Moultrie.

The canal descends 10 feet at Black Oak by a lock, and about a quarter of a mile further on it makes another descent of 10 feet, and here for the first time we find a natural water course supplying it with water.

About 1844 the water was constantly disappearing from this short reach. No ordinary art could stop the leak. It was found to proceed from the sinking of a portion of the lower rock upon which that whole country lies. Mr Smith, the superintendent, had a wooden floor laid at the bottom of the canal nearly the whole length of this reach and they succeeded in holding the water.

We have now gone over fifteen miles and find that the whole course has been over this highland. In no case has any use been made of the natural water courses which flow near the line of the canal into both rivers. Greenland Swamp, which might have been made available as the Santee bed, is used only to supply the deficiencies of Kirk Swamp, and for that purpose huge dams were constructed to raise the water and turn it from its natural channel, and Biggin Swamp with its inexhaustible supply of water has been entirely neglected. We now have a view of Biggin Swamp, but carefully avoid entering it. Skirting along the edge of the swamp the canal overlooks and in some cases intersects the rice field of Wantoot plantation, where a large bank is necessary to furnish a bed, and it is not until we get to Cole Hill, about a mile and a half below Black Oak, that we fairly enter the swamp. This is done by a lock of 9 feet descent; from this place to Simpson's the distance is three miles, and this level is abundantly fed by the waters of the Wadboo Springs. Simpson's Lock is a double lock, with a descent of 15 feet. Here the canal reaches tidewater, and here it might have stopped; but in consequence of the tortuous character of the stream and its many obstructions, it was deemed advisable to cut a new channel more than two miles in length to the river. This is the channel of which I spoke in the early part of this essay as an illustration of the jealous vanity of the engineer. This lies partly on high land and partly in the swamp, where it is bedded above the surface. It was expected that a town would be built at Simpson's. It lies under a high hill, and there is a large basin for the accommodation of boats. Here is a large brick ware house, and the whole scene is very pleasing and picturesque. A short distance south of the Monck's Corner road the canal enters Cooper River. At its terminus is a large wooden lock very wide, so that boats on leaving the canal may here trim their cargoes for river navigation. When the gates of this lock are left open the tide rises up to Simpson's Lock.

Thus we have a description of the work. All judges who have visited it speak in terms of the highest admiration of its excellence and perfect finish with which the whole of it is executed. If Col Senf erred in carrying his canal so great a distance over the highlands he certainly exhibited commendable fidelity in the manner of its execution. The descent from the summit level to Cooper River is 69 feet.

As far as I can learn this was, if not the first, certainly the second enterprise of the kind undertaken in the United States. An attempt to get round the falls of the James River, at Richmond, was commenced, but suspended by the breaking out of the Revolutionary war. A short canal in Massachusetts was chartered in 1792, and probably finished before the Santee Canal. This manifestation of enterprise in South Carolina taken in connection with the history of the South Carolina Railroad, is very remarkable. It shows that our people have the spirit of enterprise; it shows also perhaps that they greatly lack administrative ability. For want perhaps of this latter virtue has originated the pernicious practice of rely-

[illegible] the State to do those things which ought to be left entirely to individual or associated enterprise.

I have not been able to ascertain the number of shares into which the stock of the canal was originally divided, nor the price of subscription. *Neither of these were fixed by the Act of Incorporation. Tradition says there were a thousand shares, and as the cost of the work was about eight hundred thousand dollars, the actual cost of each share must have been about eight thousand dollars. I have often heard that some sanguine gentlemen, confident of the value of the property, subscribed for several shares, and were seriously crippled in their estates in order to pay their subscriptions. When the canal was finished there were no debts to be funded. The modern resources of building with borrowed money was unknown to the financiers of that epoch. As soon as it commenced its work its earnings were honestly its own, and when it paid a dividend it was an honest one.

The revenue of the canal was derived wholly from tolls on boats passing from one river to another: and as the cost and waste of passing all boats was the same, the toll was indiscriminately fixed at twenty-one dollars for a passage through, so that nearly every boat paid a toll of forty-two dollars. I say nearly every boat, for a practice prevailed extensively to have two boats, one of which fitted into the other. The two came down the river with cotton on each: but after the load was discharged in Charleston the smaller boat was lifted into the larger, received the return freight, and the two returned to the Santee as a single boat.

It was not long before the hopes of the projectors of the work began to fade. Whatever might have been the business which the upper country could give, the introduction of the cotton culture, whilst the construction was going on, gave a character to the industrial pursuit of the country which it has never lost. Instead of sending down boatloads of miscellaneous products of industry, the boats were all freighted with cotton. As I have already observed, it is useless to consult the newspapers of the early years of the century for information respecting the business of the canal. It is probable that the cotton business very early reached its ne plus ultra. As I know that the most prosperous period in the history of the canal was about the year 1820 I have consul the papers of that period and find that about seven hundred and twenty boats arrived in Charleston bearing about seventy thousand bales of cotton. These boats came in from October to June inclusive; the months of July, August and September were devoted to cleaning out the canal and putting things in readiness for the winter work. In order to command the laborers for this important work the company was authorized to import and keep three hundred slaves.

From this statement you will infer that even in its most prosperous day the canal did a business far from commensurate with the expectations of its founders. Such I believe is the fate of every work that depends upon a great staple—cotton made men rich, but kept the country poor. Its magic influences paralyzed all energy for any other pursuit, and too often the boats which brought the cotton from the country would return with corn to feed the producers of cotton. It was once proudly thought that cotton was king, and so it is, a king who rules despotically over his own subjects, keeps them poor and makes them the thralls of the rest of the civilized world. Loving my State as I do and knowing as I do the pernicious influence which that meritorious staple has wrought and is still working upon us, if I were an absolute governor I would punish with death every citizen of the State who would plant a seed of it.

But the canal was destined to suffer serious loss from the meterorological state of the country. The years 1818, 1817 and 1819 were years of protracted drought. All the ordinary springs were dried up, and there was manifested the error of Col Senf in utterly disregarding the perennial limestone streams which run along its whole course. The canal was dry from White Oak to Black Oak. I remember when a boy that I walked on the dry bed of the canal between the two locks at that place. Then were all the roads to Charleston whitened by the tents of the wagons as they slowly pursued their toiling way to and from the metropolis; and then did the unfortunate spirit of public improvement get possession of our Legislature and make turnpikes for these cotton laden wagons. So protracted was the drought that at last the company determined to resort to the use of steam to fill the canal with water. Two engines were erected, one at White Oak to lift the water from the river, and one at Big Camp to lift it to its summit level. After a great expenditure of time and money the engines began to play. That at White Oak barely furnished water to fill up the leakage; that at Big Camp, I have been told by one who saw it, commenced its operations by lifting up a boy who was recklessly leaning upon the beam, but fortunately doing him no damage except to frighten him, and continued working for half an hour, when it stopped and never worked again. Here was the same spirit of enterprise of which I have already spoken, but either premature or misdirected. The engines

were bought by an enterprising citizen of Rhode Island, who sold them, and a litigation grew out of the sale which annoyed me for several years, inasmuch as I was especially commissioned by the Court of Massachusetts to take testimony respecting the engines, and I always had the mortification of reporting that the servants of the canal could give no answers to their questions.

At the end of three years the rains came again to fill the grounds, and then commenced the pooling period of the company. The shares were sold at three hundred dollars, and the dividends were sometimes as high as forty-five dollars, or 15 per cent on the market price of the shares *

In 1829 the South Carolina Railroad was commenced and about 1840 the Columbia branch was finished. This was, as might be expected, a serious blow to the canal. But not so great as might be reasonably supposed. The produce of the Saluda and of a considerable portion of the Broad River had always found a market in Augusta, and the people found a more ready means of selling their produce and buying their supplies by wagoning to Augusta than by the tedious and often dangerous river navigation to Columbia. Hence the receipts of the canal did not suffer more than from three to five thousand dollars per annum. But the handwriting was on the wall and the days of the canal were numbered. As soon as the Camden branch was completed the canal was reduced to the near neighborhood trade, and measures were adopted for closing it permanently.

As the canal had a perpetual charter and had incurred serious obligations, an Act of the Legislature was necessary to effect a permanent closure. In 1850 this was obtained and the corporate life of the canal closed. It now lies a large and noisome ditch, a nuisance to the neighborhood, but a monument of the enterprising spirit of the generation that conceived and executed it.

From the description of the canal and its resources given in the foregoing paper it will be seen that the people of Cooper River made unfounded complaints when they charged the canal with keeping back the water that naturally belonged to Cooper River. In point of fact the canal gave to Cooper River water which nature had intended for the Santee. Kirk Swamp, the principal reservoir, is a tributary of the Santee, and Greenland Swamp was made to swell the stores of Kirk Swamp. All the reservoirs are about the summit level, and are naturally summit swamps, whose outlet might be into either river. The only water of Cooper River which is used is Pooshee Spring and the Wadboo Springs—and these when they filled the canal were allowed to pass out and seek their natural receptacles.

(*The stock was divided into 720 shares at $1.000 each. M.)

APPENDIX.

It will be seen by the following extracts from Charleston papers that Prof. Porcher's search for items in contemporary newspapers concerning the Santee Canal was not as thorough as it might have been :

"Thursday last a number of gentlemen met at the State-house in this City, to take into consideration the proposed plan of opening a communication by locks between Cooper and Santee rivers. The result of the meeting was to petition the Legislature at their next sitting, for a charter.—That the company should consist of a thousand shares at 100 l. sterling each share, three guineas are to be paid down at subscribing, the remainder as shall be agreed upon when the charter is obtained.

Honorable John Faucheraud Grimke and Richard Hutson, Esquires, Major Mitchell, Thomas Jones, John Dawson, Aaron Loocock, and William Bull, Esquires, were appointed a Committee to receive subscriptions.

The above proposed plan is so highly approved of, that one gentleman has subscribed his name for three hundred shares."—*The South-Carolina Gazette, and the Public Advertiser*, Saturday, November 12, 1785.

The Legislature met in Charleston on Tuesday, January 31, 1786, and on Wednesday, February 1st., the following notice appeared in *The Charleston Morning Post, and Daily Advertiser* and was repeated in the issues for the 2d., 3d. and 6th. (slightly changed) :

"A meeting of the Subscribers and persons interested in the opening of the Canal between Santee and Cooper Rivers, will be held at the City-Tavern, on Monday next, at six o'clock in the evening."

On Tuesday, February 7th. the Legislature took up the Canal matter, and the report of the House proceedings for that day, published in *The Charleston Morning Post, and Daily Advertiser* for the 8th. says :

"Chancellor Rutledge, as chairman of a meeting held last night at the City Tavern, of subscribers, &c. to the projected canal between the rivers Cooper and Santee, praying for assistance to prosecute their intended undertaking, which would be immediately beneficial to this state, as well as to individuals in particular. The petition was received, and ordered to be committed."

Again the above named paper for Tuesday, March 14th., contained the following notice, which was repeated with slight changes on the 16th, and 17th :

"A Meeting of the Company of the Inland Navigation between Santee and Cooper Rivers, will be held at the City-Tavern, on Thursday next, the 16th instant, at six o'clock in the evening, on business highly interesting to the concern; it is therefore requested that every subscriber, who possibly can, will attend.

March 14th, 1786."

Again on Saturday, March 25, 1786, we find :

"At a meeting of the Incorporated Company for opening the inland navigation between Santee and Cooper Rivers, held at the City-Tavern on Thursday the 23d instant, the following officers were chosen, viz.

DIRECTORS.
His Excellency Gov. MOULTRIE,
President ;
Honorable JOHN RUTLEDGE, *Esq ;*
Vice-President :

Judge Burke, Judge Grimke, Judge Drayton, Gen. Pinckney, Gen. Sumter, Gen. Marion, Commodore Gillon, Major Mitchell, Edward Rutledge, John Huger, Thomas Jones, Thomas Walter, William Doughty, Joseph Atkinson, Henry Laurens, jun. James Sinclair, Theodore Gourdin, Aaron Loocock, and Theodore Gaillard, Esquires.

Dan. Bourdeaux, Esq: *Treasurer.*
Stephen Drayton, Esq: *Secretary.*"

From this time on we find numerous calls for meetings, notices of elections, calls for payments on shares and reports of the progress of the work, until on Thursday, May 28, 1801, *The Times*, of Charleston, contains the following very interesting notice :

"We are happy in being able to announce to the public, that Mr. William Buford, an enterprising citizen, who lives on the banks of Broad River, near Pinckney Court House, which is more than ninety miles above Granby, arrived in this city, through the Santee Canal, on Tuesday the 26th inst. with his own boat, built on his own land, and loaded with his own crop, after having safely passed over all the falls and shoals that are between his plantation and Charleston.

This is the first enterprize of the kind that has taken place at so great a distance from the sea coast: and from its success, leads to the most pleasing anticipation of the immense advantages which are likely soon to result from the easy intercourse that may now be carried on, between Charleston and the interior country, by means of the Santee Canal.

When the obstructions of the navigation of the Broad and Catawba rivers, (which are far from being as numerous as have been represented) shall be removed, the superabounding productions of the upper country will flow into Charleston in such full tides, and with so much expedition and so little expence, as will lower our markets, and at the same time fill the pockets of our remote fellow-citizens. And what will be equally agreeable, the gentlemen who have persevered so successfully, and at such great expence to complete the canal, will possess a property which while it contributes to the welfare of the state, will yield them an income

that will amply repay all that they have expended in an undertaking which is unequalled in the new world!"

Colonel Senf, the engineer of the Santee Canal, of whom Professor Porcher has written so entertainingly, died in 1806, as will be seen by the following notice published in the *Charleston Courier* of Wednesday, September 3, 1806 :

"Died, at his Seat in Rocky Mount, South Carolina, on the 24th ult. of a lingering illness, in the 53d year of his age, Colonel Christian Senf, Chief Engineer of the State of South Carolina. He was an Officer of merit and information, and had served with great applause in the Southern States, as an Engineer, during our Revolutionary contest."